GROUND ACCIDENT

REPORT

14 AUGUST 1972

FOR IDEALIST OPS

		USAF A	CCIDENT/I			eeffs),)				
1. DATE OF OCCURRENCE	E (Year, month and day)	2. VEHICLE(S)/MATE (TMS & Serial Nr.,	RIEL INVOLVED			3. FOR GE	OUND ACC			
14 August	ĭ 070	113 /T o O		:	~ .		·	C	,	
4. PLACE OF OCCURREN		HI/LO O			5. HOUR A	N,		4	·	
BASE, IDENTIFY. IF O	FF BASE GIVE DISTANCE	FROM NEAREST BASE.	THOM NEAREST IN	JANA. III ON			NE LOCAL	0. X D4	\Y [
7. ORGANIZATION POSS	ESSING OWNING VEHIC	CLE OR MATERIEL AT TIA	ME OF MISHAP		0820			□ DA	wn [<u> </u>
Major Command	Subcommand or AF			Wing	Group	1	Squadron o	or Unit	Name or	nd
Hq. Cmd							Det	"H"		
8.		(List organizatio	ns of second vehicle,	if they differ from	Item 7 above)		DCO	11	<u> </u>	
9. BASE AND COMMAND	SUBMITTING REPORT (E	Do not Abbreviate)					···		<u> </u>	
1U. (For air	rcraft include operator an	LIST OF P	ERSONNEL D	RECTLY INV	OLVED	ali personni	l use addit	ional shee	Mel l	
Last Name	First Name	M.1.	Grade	Service No.	Assigne		Aero		lnju	y
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11. NARRATIVE DESCRIPT										
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·										

PREVIOUS EDITION OF THIS FORM IS OBSOLETE.

					CCIDENT RE					
1. FUNCTIONAL AREA		2 WEATHE	Complete all blocks R AND VISIBILITY AT A				required N OF ROAD OF	OTHER CHREA	CEE /Suma	:6.0
Rear of P.E	i.				3. 117		OI KOAD OF	OTHER SURPA	CEU (SP#C	
trailer		Cle				N/A				
4. UNSAFE CONDITIONS	CONTRIBUTIN	G TO THIS M	ISHAP							
Improper cl	othin.	g con	tributed	to i	njuries s	ustai	ned			25X1
5.		***********	Р	ERSON	REPORTED NO					
Name Grade Serial N	mbor				b. Assigned Organize	ation (Base, C	Command)			c. Aero Rating
d. Primary AFSC e.	Duty Asgnt.	f.			Status			g. Pre-existing	Phys. Lim	
			I DUTY (ON BASE)		N DUTY (OFF BASE)	3 D	AY PASS		,	
	E. Te		F DUTY (ON BASE)		FF DUTY (OFF BASE)		FURLOUGH	N/A		
i. Sex i. Age j. Ye Edi			ne of Accident ng oxygen	I. Descri	pace required)	Unsafe Perso	onal Factor, Incl	uding Violation	ns (Continu	ie under Remarks, i
M 32 N			seat kit							
n. Injury (Nature and locati			•		n. Disability Classific					o. Days Lost (Est.
face, a		_	burns on		None Temp. Total					40
	q. Thrown fr		r. Speed (MPH)		Belts	t. Valid P	ermit	u. Fire		cupants in Vehicle
70 7 7	Yes		Legal	Installed:	Yes No	State: Yes	No	Yes		
N/A Driver Violation	x. Violation/		Est	1	Yes No er Moving Violations/	1				ining
Yes				(Descri	be each in item 11, A	F Form 711)	de (3) 180	z. rype or	Suite, 110	
No	Date				,					
					N/A				N/A	
					HICLE NO. 1					
Vehicle: Mator		b. Owner (Major command or non-				c. Year	d. Make	e.	No. Doors (Body ty)
Spec. Purpose Describe Vehicle Damage			N/A							
, Describe Venicle Damage	•		N/A				g. Repair (Lost (Est.)		Days Out of Service (Est.)
				VEI	IICLE NO. 2					
. Vehicle: Motor		b. Owner (Major command or non-	USAF)			c. Year	d. Make	e. 1	No. Doors (Body type
Spec. Purpose			N/A				g. Repair (Cost (Est.)		Days Out of Service
_			N/A					,		Est.)
					T OR GUIDED !		· · · · · · · · · · · · · · · · · · ·			
. Type, Model, Series		Ь.	Owner (Major command	1)		c.	Assigned Base			
. Describe Damage						e.	Repair Cost (Est	.)	f. Days	Out of Service (Est.
			N/A							
Type of Praperty Damage		IL	OTHER Repair/Replacement Co		PROPERTY DAN Type of Property Dan			ه بر	ir/Pa-l-	ment Cost
)xygen btl				1	Oxygen sh		jacent			railer
				IJURIES	AND PROPERT					
. No. Disabling Injuries		b. Property [Damage (Type and exter	11)						
	1	n	one							
			COMMENDATI							

25X1A

SPECIFIC ACTION TAKEN BY SUPER Approved For Release 2001/11/16 : CIA-RDP74B008	VISOR 336R000300160001-0
	•
SIGNATURE AND GRADE	DATE
12. COMMENTS OF ORGANIZATION COM	MANDER
,	
SIGNATURE AND GRADE	DATE
REMARKS (Use this space for additional information; identify the items)	
)	
:	

F FORM 711a

of ∞ U. S. GOVERNMENT PRINTING OFFICE: 1963 O - 711-355

PAGE 2

<u> </u>			-										
				Соп			ACCIDENT RE						
1. FUNCTIONAL ARE	ĒA		2. WE/		ID VISIBILITY AT AC				DITION OF ROAD	OR C	OTHER SURFA	CES (Speci	ify)
Rear of 1	P.F	1.											
trailer				Clea:				N/A					
4. UNSAFE CONDIT	/IONS (SONTRIBUTION	1G TO TH	115 MISHA	.Р								
Tmnroper	ر م ،	othir	nor c	ontr	id buted	+0 i	injuries s	לפוני	· a i ned				25X1A
<u>s.</u>	<u> </u>	<u>. </u>	1 <u>K U</u>	UIIU.			N REPORTED NO		aliica				
a. Name, Grade, Se	erial No	umber					b. Assigned Organize		ase, Command)				c. Aero Rating
													N/A
d. Trilliary Aroc	٥.	Doily Adginit	-		terror both and an arrangement of the second	·	Status	-		g	g. Pre-existing	Phys. Limi	itations
~~~~~		P.E.	X	-	TY (ON BASE)		ON DUTY (OFF BASE)	<del> </del>	3 DAY PASS		nτ / Λ		
92270B h. Sex   i. Age	j. Ye		Activity	at Time of			off Duty (off BASE)	- Unsafe		Inclué	N/H	ns /Continu	under Remarks, if
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м 45	$ _{\mathbb{N}^{2}}$		btl	in	seat ki		N/A						
m. Injury (Nature and	ıd locati					ъ	n. Disability Classific					1	o. Days Lost (Est.)
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legs. 3:	rd	degre	ee bi	urn	on arm				Perm. Total	^			
p. Position in Vehicle	e	q. Thrown f			r. Speed (MPH)	s. Safety	rty Belts d: Yes No		alid Permit		u. Fire		cupants in Vehicle
N/A	ļ	Yes			Est.	1	d: Yes No Yes No					l l	
w. Driver Violation		x. Violation				y. Num	mber Moving Violations/	/Accident	nts Past Three (3) \				
Yes	_ '		,	, Kecordeo			cribe each in item 11, A					<b>D</b> 1	
j e	- 1	1					<i>i</i> -					,	
No	· _ l	Date					N/A	_	_			N/A	Α
6.						PROP	ERTY DAMAGE			_			
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Spec. Purpose f. Describe Vehicle D		-	Ш		<u>N</u>	/A			- Rer		. /8-4 )		- Out of Convine
f. Describe remains	Danius.	3			TAT	- / n			g. Repo	Jir Co.	st (Esr.)		Days Out of Service (Est.)
					TA\	/ <u>A</u>	EHICLE NO. 2						
a. Vehicle: Motor			b. Ov	wner (Majc	or command or non-		Enless its -		c. Year	7	d. Make	e. 1	No. Doors (Body type)
Spec. Purpose			-			/A							
f. Describe Vehicle (	Damag	je				<del></del>			g. Repo	oir Co	st (Est.)		Days Out of Service (Est.)
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7.							FT OR GUIDED	MISSI					
a. Type, Model, Seri	ies			b. Own	ner (Major command	d)			c. Assigned Ba	.S €			
d. Describe Damage									e. Repair Cost	/Fet.)		1 Days	Out of Service (Est.)
d. Describe seeming					TAT.	. /Δ			e. Kepun	(E31.,		T. Duj.	Out or service je,
8.				,		/	PROPERTY DAM	MAGI					
a. Type of Property C	Damag	ed		b. Repr	air/Replacement Co		c. Type of Property Dar		<u> </u>		d. Repr	air/Replace	ement Cost
Oxvgen bt		svste	m				Oxvgen sh	ed_	adiacer	+	to P.I	E. t.	railer
9.		<del></del>					ES AND PROPER						
o. No. Disabling Inju			b. Prop	erty Dama	age (Type and exter	nt)							
FATAL	OTHER												
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SPECIFIC ACTION TAKEN BY SUPERY Approved For Release 2001/11/16: CIA-RDP74B008	VISOR 36R000300160001-0
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SIGNATURE AND GRADE	DATE
12. COMMENTS OF ORGANIZATION COMM	MANDER
SIGNATURE AND GRADE	DATE
REMARKS (Use this space for additional information; identify the items)	

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PAGE 2

REPORT OF INVESTIGATION OF OXYGEN GROUND ACCIDENT,

At 0820L on 14 Aug 1972 an oxygen filter (FSN 4440-651-7012) exploded resulting in personnel injury and equipment damage. Equipment used was standard USAF high pressure servicing components and oxygen cylinders. At the time of the accident three oxygen cylinders (10 bottle pallet) were connected to the servicing manifold which in turn directs oxygen flow through the filter to the servicing outlets in the P.E. trailer. Normally one cylinder is open to the manifold, although it is permissable to have three if required. Purpose of the servicing equipment is to afford high and low pressure oxygen for pilot pre-breathing, Life Support equipment, maintenance and servicing of bail-out bottle in pilots seat

kit. Servicing components were located adjacent to the P.E. trailer in a metal shed. Unit and associated plumbing was installed in May 1971 by assigned technicians. Operating and servicing of the equipment is performed solely by the P.E. techs. Periodic testing for purity is accomplished by LAC oxygen specialist.

The oxygen cylinders had been replaced on 11 Aug and a new filter was installed. Pressure readings observed on the three connected bottles were 1700, 1750 and 1800 PSI. A manifold valve to the bottle containing 1800 PSI was opened and remained on during the period 11-14 Aug for the high pressure servicing of a bailout bottle. On 14 Aug the P.E. techs entered the oxygen shed to select another cylinder with a high pressure for servicing a bailout bottle. had removed a servicing line from a cylinder and attached it to a fully serviced bottle. When opening the manifold mounted valve from the line servicing the cylinder, pressure was noted to be 1700PSI. Shortly thereafter the filter was observed to be emitting smoke, immediately thereafter an explosion and fire resulted.

#### FINDINGS:

- 1. An approximate four inch section of the filter chamber blew out from an apparent fire within the chamber.
- Oxygen sample taken on 14 Aug was satisfactory. Although the sample was not taken from the specific bottle in question, it is a representative sample from same batch.
- The P.E. tech failed to remove the protective tape from the outlet ports on the filter cartridge prior to insertion into the filter container.
- P.E. techs sustained first and second degree burns on exposed skin surface due to their abbreviated attire of shorts and short sleeve shirts.

25X1A

### Attachment 1

Initial installation check on Personal Equipment panel.

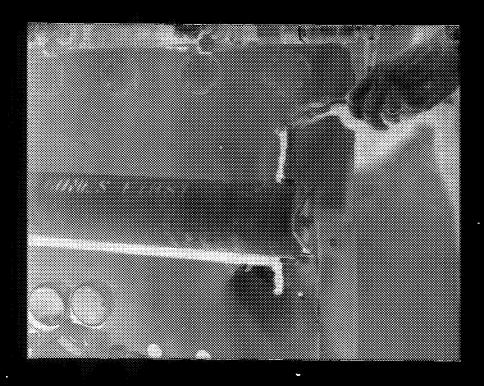
-	AMPERIAL FOX SOL		T	PAMPLER NO		PECIFICATION NO	
	DATE RECEIVED IN LAB		IURK, POI		1.	MIL-9-27210D	
71-160	13 May 71 vellon, Name Address Phone	. 500	TREASON FOR	Ser. 4	AMPLE		
UBMITTED BY (DIGBIN)			A PERIO	DIC RES	SAMPLE	PREPRODUCTION	
	5	TATINTL	i.	OTHER (E.Im)			
						ORAGE	
	PROCUREMENT	-	BTORAGE TA	BASE HK ND		INTITY REPRESENTED	
ON TRACTOR				ANEL #1		2260 PST BTL	
OCATION OF FACILIT	Y			F LAST ADDITIO	N DA	TE OF LAST ADDITION	
			CONTRACT			TE OF LAST PURSING	
ONTRACT NO			CONTRACTA	NA ·	1	4 May 71	
DATE SAMPLED			SUPPLIER				
				LOX MANT		TE SAMPLED	
AMF LE NO			0-71			4 May 71	
RESSURE OF SAMPLE	A SUBMITTED			F SAMPLER SUB	MITTED	and the second s	<del></del>
				and the state of t		430 PSI	
		TEST	RESULTS		<del></del>		
PURITY % VOLUME	99	.75	C2 + HYDRO Equivalent)	CARBONE (EII	nane	.86	
MOISTURE (mg/liter)	or (ppm)		NITROUS O	XIDE PPM		. 0	
DOR	No	ne	HALOGENA	REPRISE (Freen ers		0	
			COMPOUND				-
CARBON DIOXIDE F	Tr	ace		letol PPM		0	
METHANE PPM	16		(Except Inc.		PM	and the second s	~~~~
ACEPTLENE PPM		Λ.	1	DROCARBONS (	'Ay		
		0		and the same of th		giran dan maganin maga	
ETHYLENE PPM			PARTICUL	ATE (mg'lifer)			
REMARKS							
Personal equ	ipment panel, fi	rst time us	e at this	station.		ST	ΑТ
Notified	1500 h	rs, 13 May	71.			3	-
Product repr	esented by this	sample is s	atisfactor	y for use	IAW T.C	). 42B6-1-1.	
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	and the second second						
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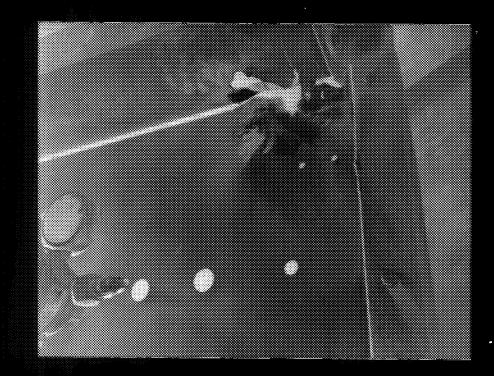
Attachment 2

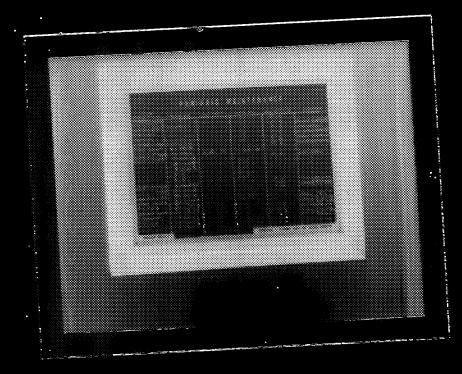
Sample taken prior to accident.

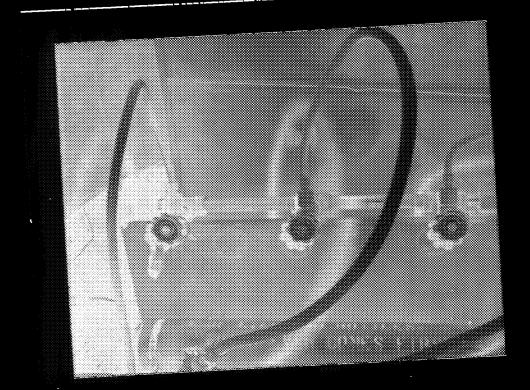
Attachment 3

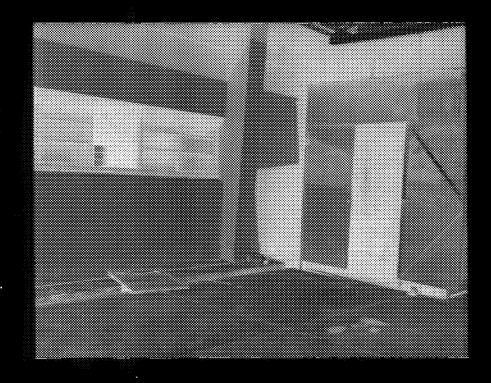
Photos taken subsequent to explosion.



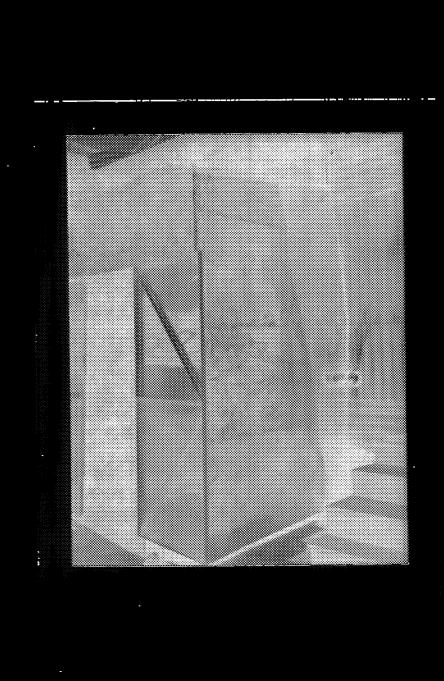












Attachment 4

Statements.

#### STATEMENT

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25X1A the evening of talked to both 14 August 1972 and they both seemed to think that there was something 14 other than oxygen in the bottle in question. Stated that made sure that there was no foreign matter in the valve of the bottle, by turning the valve on and blowing it out prior to connecting the then connected the line and turned on the bottle, there was 1100 lbs of pressure on the line prior to turning on the new bottle, when the new bottle was turned on the pressure went to 1700 lbs. ____ then told ___ that there was not enough pressure to told service the cylinders in the survival kit, at that time that something was wrong because the filter was smoking. looked down and saw the smoke and told that it was only cold ightharpoonupcausing it to smoke, then immediately he realized that gaseous oxygen dosen't get cold under pressure and he started to say, " lets get out of here ", when he got the words " lets get ", out of his 25X1A mouth the filter blew. This all took place in a matter of seconds after the bottle was turned on.

#### STATEMENT

On 14 Aug 1972 I was servicing a survival kit and the present oxygen supply was 1100 PSI. I needed approximately 2000PSI, so and I went to the oxygen source to turn on a new bottle. disconnected one of the three low bottles, and purged the new bottle prior to 25X1A connecting supply line to it.

After the line was connected and the valve was opened by what looked like condensation vapor was coming from the filter. We both immediately realized the oxygen was going the wrong direction for a freeze up and that it could only be excessive heat causing the smoke.

25X1A

I started to tell "Lets get out" but the filter blew before I could finish. I remember the pressure gauge going to 1700 PSI before the explosion. This all took place in a matter of 5 seconds after the 25X1A new bottle was turned on.

# Attachment 5

Sample of oxygen from the batch in question prior to accident.

72-228 2	O Jul 72			Gerand Jerophy	SPECIFICATION NO	
Jam TTED BY (Organizatio		STATINTL	PERIODIC	HESAMPL MER (LIN)	E PREPRODUCT	ION
PR	OCUREMENT		ZAR	errenderson (visite) (visite) errenderson som errenderson errenderson errenderson errenderson errenderson erre	STORAGE	
ON TRACTOR			STORAGE TANK	40	QUANTITY REPRESENT	€ D
OCATION OF FACILITY			QUANTITY OF LA		2260 Pdf Bot	
			100000000000000000000000000000000000000	• F KIDITION	DATE OF LAST ADDITE	> <b>N</b>
ONTRACT NO			CONTRACT NO	rediffere til de erikke kenkere har (lyggeper, e y yezer eller	SAYE OF LAST PURGI	1 6
ATE SAMPLED			SUPPLIER	of the state of th		<del></del>
			Low	Pi (1)		
ample no			0-72 If		OATE SAMPLED	-
RESSURE OF SAMPLER SUI	BM#TTED		PRESSURE OF EAS	JPLER SUBMITTER		
	******			5 PJ**		
			RESULTS	BANE /P.4		
URITY % VOLUME		99.7	CZ + HYDROCAR Equivalent) PPM	OUNS (EINANO	i)	
DISTURE (mg/liter) or (p)	pane)		NITROUS OXIDE	PPM	U U	
DOR	į	None	HALOGENATED	REPRIGEHANTS (Freen stg) PPM	Ů.	
ARBON DIOXIDE PPM		•73	СОМРОИНИЯ	OULVENTS (Trichloristhylane	Ċ	····
ETHANE PPM		13	OTHER CONSTIT	UENT		· ·
CENE PPM		Ŋ	TOTAL HYDROC.			
THYLENE PPM		U	PARTICULATE (	mg. liter)		********
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	in the second of		APPHOVED OF INDE	unue. Date. Organi. L. L. C. :	rational Code)	
			Jo.	rald in K	e, ope, war	

### Attachment 6

Samples taken from four (4) separate bottles after accident.

### Attachment 7

Copy of Hydrostatic testing of cylinders in use at time of accident.

Attachment 8

Lab analysis of cylinders sent to WPAFB subsequent to accident.

LAB SAMPLE NO	DATE RECEIVE						ER NO	SPECIFICATION NO	
72-766-0	20 Sep		1	1700			3410 sis of sample	M11-0-27210D	
SUBMITTED BY (Organ	nization, Name Add	STAT			PERIODIO	С	RESAMPL	e []]PREPRODUC dent Investigat	
	PROCUREME	NT			B/	ASE		STORAGE	
CONTRACTOR	FROCOREME	IN I			<del>-</del>			QUANTITY REPRESENTS	
					N/A			N/A DATE OF LAST ADDI	
LOCATION OF FACIL	.ITY			ľ	QUANTITY OF LAST ADDITION N/A			N/A	
CONTRACT NO				c	CONTRACT NO N/A			DATE OF LAST PUR	
DATE SAMPLED				s	UPPLIER	: /A	And the second s		
SAMPLE NO					ASE SAMPLE	I/A NO		DATE SAMPLED	
-						I/A		N/A	
PRESSURE OF SAMPLER SUBMITTED							LER SUBMITTE	O	
				TEST RE	SULTS				
PURITY % VOLUME	E	99	99.65		C2 + HYDROCARBONS (Ethane Equivalent) PPM			0.8	
MOISTURE (mg/lite	or (ppm)	× 0.00			NITROUS OXIDE PP		PPM	0.0	
ODOR		<u>No</u>	ne		ALOGENATI	ED	REFRIGERANTS	0.0	
CARBON DIOXIDE	РРМ	0.3		(	OMPOUNDS.	],	SOL VENTS (Trichloroethylen etc) PPM	0.0	
METHANE PPM		12			GTHER CONSTITUENT (Except Inert Gases) PPM				
ACETYLENE PPM	1	0.	00	1	TOTAL HYDROCARBONS (By Weight As Carbon) PPM				
ETHYLENE PPM		0.	^	1	PARTICULAT	TE (n	ng/liter)		
Material cons Visual Defect					ecordance	e wi	ith Tech. (	Order <b>42</b> B6-1-1.	
	ature Date Organiza <b>21. Sep. 72</b>	ation Code)		ī	homas J. O	'Sha		enizetionel Code)	

72-765-0	20 Se	ved in Lab sampler pressu p 72 O psi	RE. PSI SAM	AF237828	M11-0-27210D
SHAMITTED BY (Order			REASON FOR ANA	LYSIS OF SAMPLE	[-1]
			PERIODIC	RESAMPLE HER (List)	e PREPRODUCT
Transfer of the second of the		STATINTL	Cyl	1000	
	PROCUREA	MENT	BASE		STORAGE
CONTRACTOR			STORAGE TANK N		QUANTITY REPRESENT N/A
LOCATION OF FACIL	_ITY		QUANTITY OF LA		DATE OF LAST ADDITE
CONTRACT NO			CONTRACT NO		DATE OF LAST PURGI
			N/1	<b>L</b>	N/A
DATÉ SAMPLED			SUPPLIER N/	1	
SAMPLE NO			BASE SAMPLE NO		DATE SAMPLED
PRESSURE OF SAMPI	LER SUBMITTE	<u> </u>	N/I	MPLER SUBMITTED	N/A
			UNK		
		TEST	RESULTS		
PURITY % VOLUMI	E	Insufficient sample	C2 + HYDROCAR Equivalent) PPM	0.0	
MOISTURE (mg/lite	er) or <b>innix</b>	Insufficient sample	NITROUS OXIDE PPM		
ODOR		Insufficient sample	HALOGENATED	REFRIGERANTS (Freen etc) PPM	0.0
CARBON DIOXIDE	PPM	<b>35</b> 5	COMPOUNDS	SOL VENTS (Trichloroethylene	0.0
METHANE PPM		12	OTHER CONSTI		
ACETYLENE PPM	м		TOTAL HYDROG		
		0.00	Weight As Carbon	n) PPM	
ETHYLENE - PPM		0.0	PARTICULATE	(mg/liter)	
parameters to		en ewlinden. None			
	<b> vy</b> .8	en cylinder—Rone			
	nature Date Orgon				